

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**  
**FACT SHEET**

Permittee and Mailing Address: Shell Guam, Inc.  
643 Chalan San Antonio, Suite 100  
Tamuning, Guam 96913

Permitted Facility and Address: Shell Guam F-1 Fuel Pier  
On Cabras Island at Foxtrot One Pier  
Piti, Guam 96925

Contact Person: Mr. Plaridel Santos  
V.P. Operations  
643 Chalan San Antonio, Suite 100  
Tamuning, Guam 96913  
(671) 565-2300

NPDES Permit No.: GU0020338

**PART I - STATUS OF PERMIT**

Shell Guam, Inc. (hereinafter, "Shell Guam" or the "permittee") has applied for renewal of its National Pollutant Discharge Elimination System (NPDES) permit pursuant to U.S. Environmental Protection Agency (EPA) regulations set forth in Title 40, Code of Federal Regulations (CFR), Part 122.21, for the discharge of tank bottom water draws and storm water runoff from its two bulk petroleum storage (displacement) tanks located at the F-1 Pier on Cabras Island in Guam (F-1 Pier) to Apra Harbor which connects to the Philippine Sea, Pacific Ocean. These regulations require any person who discharges or proposes to discharge pollutants from a point source into waters of the U.S. to submit a complete application for a NPDES permit, including renewal of a permit. Because the Territory of Guam (Guam) has not been delegated primary regulatory responsibility for administering the NPDES program, EPA is issuing a NPDES permit which incorporates both federal CWA and Guam water quality requirements. In accordance with 40 CFR 122.21(e), on November 29, 2005 the permittee submitted a complete application for renewal of its NPDES permit. The permittee is currently authorized to discharge to Apra Harbor under the NPDES Permit No. GU0020338, which became effective on March 21, 2001 and expired on March 22, 2006. Pursuant to 40 CFR 122.21, the terms of the existing permit are administratively extended until the issuance of a new permit.

**PART II – DESCRIPTION OF FACILITY**

Shell Guam operates a Docking Facility (F-1 Pier) which is an off-loading point for fuel transportation vessels to re-supply Shell and other storage tanks at Cabras and the Shell Agat Terminal. There are also two fuel storage tanks (displacement Tanks 1929 and 1930)

associated with the F-1 Pier, which are used as needed in the displacement of fuel from the lines and for temporary storage. Discharge from the facility consists primarily of Pier and Tank Farm storm water runoff and Tank bottom water draws. The facility has an Oil/Water Separator (OWS), but has had difficulty meeting the discharge parameters on a consistent basis. In 2003, Shell Guam hauled water from the F-1 Pier to the Agat Terminal OWS for seven months out the ten months during which it had water discharge, due to problems with the existing F-1 Pier OWS. In a letter dated April 16, 2004, Shell Guam informed EPA that it was stopping all discharges from this facility and transporting all oily water to the Shell Agat Terminal for treatment using the OWS at that facility. Shell Guam has not discharged from this outfall since that time. However, the permittee would like to renew the permit so that if and when it upgrades the existing OWS to meet discharge requirements in the permit consistently, it can begin discharging processed water once again at the F-1 Pier.

### **PART III – REASONABLE POTENTIAL**

In order to establish reasonable potential, operations that result in discharges were analyzed, and monitoring data were reviewed.

#### **A. Tank Bottom Water Draws and Storm Water Runoff**

Water from condensation contaminates the fuel and must be drawn off the bottom of the storage tanks. Operators of tank farms in California have indicated that discharges from tank bottom water are potentially significant sources of pollutants.

Additionally, storm water runoff can become contaminated by coming in contact with spills, leaks, improperly stored materials and wastes, and an inadequately cleaned facility.

Benzene, toluene, ethylbenzene and xylene are the more volatile components of petroleum hydrocarbons. These pollutants are usually present in petroleum products, but are most associated with petroleum products with lighter ranges of hydrocarbons, such as gasoline. Because discharges come into contact with petroleum products, including gasoline, and because oil-water separators are the only means of treatment, it is reasonable to expect that these pollutants may be discharged to surface waters.

Lead is being phased out as an additive in gasoline, and leaded gasoline has been banned for on-road vehicles, it may still be used for off-road use, such as marine engines. Additionally, unleaded gasoline contains low levels of lead. Therefore, permittee shall sample for lead either separately within 90 days of permit issuance or as part of the Priority Pollutants Scan that is also required as part of this permit. If the results show that the limit was not exceeded and no there is reasonable potential for the limit to be exceeded, then no further sampling is required for the duration of this permit. If however the sampling data shows that the lead level was exceeded or that there is reasonable potential for the level to be exceeded, the permit may be re-opened and a limit for lead imposed.

## **B. Monitoring Data**

Prior to the issuance of the previous permit, there had been no discharge from this facility for the last 30 years. All oily water was trucked via vacuum truck to the Shell Agat Terminal and oily water separator (OWS) there. The subsequent effluent was discharged along with the terminal effluent into the Big Guatali River under a separate NPDES permit with Permit No. GU0020150.

This permit with Permit No. GU0020338 was first issued in March 2001 and the permittee began discharging pursuant to this permit. However in 2003, the sampling data indicated that the permittee exceeded the limits for Benzene and Oil and Grease on a few occasions, and after unsuccessfully attempting to remedy the situation at this facility, ceased discharging under this permit in April 2004. Since that time the permittee has reverted to transporting oily water to the Shell Agat Terminal facility (GU0020150) for treatment and discharge. The permittee however, is interested in preserving its right to discharge pursuant to this permit, provided it installs a new treatment system that can successfully treat the discharge and ensure that limits for Benzene, Oil and Grease, etc., are not exceeded.

## **PART IV – BASIS FOR EFFLUENT LIMITATIONS**

As federal guidelines have not been promulgated for bulk oil storage and transfer facilities, limitations were established using:

1. Guam water quality standards, revised and approved by Guam on June 18, 2002;
2. National Recommended Water Quality Criteria, December 2004; and
3. Best Professional Judgement

The Guam water quality standards categorize Apra Harbor as M-3 (FAIR). M-3 waters are defined as being marine water that is intended for general, commercial and industrial use, while allowing for protection of aquatic life, aesthetic enjoyment and compatible recreation with limited body contact. Specific intended uses include the following: shipping, boating and berthing, industrial cooling water, and marinas.”

According to the Guam water quality standards, Saltwater acute and chronic and human health standards are applicable to all toxic pollutants discharged in category M-3 waters.

### **Oil and Grease**

The permit limit for oil and grease is based on Best Professional Judgment. The limit of 15 mg/L has been carried over from the previous permit. This limit is consistent with other bulk storage terminal permits. Narrative water quality objectives for oil and grease are also included in the permit.

### **Lead**

The Guam water quality standards for Lead indicate a value of 0.21 mg/L acute and 0.0081 mg/L chronic in Saltwater. The permit limit in this permit is based on the more stringent of these values, i.e. the 0.0081 mg/L. A permit limit has been included based on this value.

### **Benzene**

The Guam water quality standards for Benzene indicate a value of 0.071 mg/L to protect human health from consumption of aquatic life. There are no limits in the Guam water quality standards for the protection of marine aquatic life itself. Monitoring limits without permit limits have been included in the permit based on this value.

### **Ethylbenzene**

The Guam water quality standards for Ethylbenzene indicate a value of 29 mg/L to protect human health from consumption of aquatic life. There are no limits in the Guam water quality standards for the protection of marine aquatic life itself. Monitoring limits without permit limits have been included in the permit based on this value.

### **Toluene**

The Guam water quality standards for Ethylbenzene indicate a value of 200 mg/L to protect human health from consumption of aquatic life. There are no limits in the Guam water quality standards for the protection of marine aquatic life itself. Monitoring limits without permit limits have been included in the permit based on this value.

### **Xylene**

There are no limits in either the Guam water quality standards or in the National Recommended water quality criteria for Xylene. Therefore, the permit simply requires sampling and monitoring for this parameter, without a specific permit limit.

### **pH**

The Guam water quality standard states that for Category M-3 waters, pH shall remain within the range of 6.5 to 8.5 pH units.

## **PART V – PRIORITY POLLUTANTS SCAN**

In accordance with federal regulations, the permittee shall conduct a Priority Toxics Pollutants scan during the first effluent discharge event after the issuance of the permit to ensure that the discharge does not contain toxic pollutants in concentrations that may cause violation of water quality standards. If the scan results indicate that a limit has actually been exceeded or there is a reasonable potential for such a limit to be exceeded, this permit may be reopened to include appropriate numeric limits.

## **PART VI - POLLUTION PREVENTION PLAN**

The permit contains requirements for an extensive pollution prevention plan (PPP). The PPP is required to include: establishment of a pollution prevention committee; source identification; source control Best Management Practices (BMPs); and treatment control BMPs.

## **PART VII – OTHER CONSIDERATIONS UNDER FEDERAL LAWS**

### **A. Endangered Species Act**

The discharge is to Apra Harbor which connects to the Phillipine Sea and the Pacific Ocean. EPA thus contacted the NOAA National Marine Fisheries for a list of threatened and endangered species. The list includes the twenty eight species of marine mammals (including whales, dolphins, dugong and seal) and four species of sea turtles as listed in Appendix A. attached herewith.

The permit is a reissuance of a permit for an existing facility. No new construction, new pipelines, land, habitat, or hydrology alterations are associated with the permit reissuance. The effluent limitations in this reissued permit are all as stringent as or more stringent than those in the previous permit. The effluent limits in the permit will not result in acute or chronic exposures to contaminants that would affect federally listed threatened and endangered species, or impair any designated critical habitat. The effluent limits and monitoring requirements in the permit are designed to be fully protective of the beneficial uses of the receiving waters.

Thus, EPA believes that this permit reissuance will not affect any federally listed threatened and endangered species under the NOAA National Marine Fisheries or US Fish and Wildlife Services jurisdictions that may be present in the area of discharge. If, in the future, EPA obtains information or is provided information that indicates that there could be adverse impacts to federally listed species, EPA will contact the appropriate agency or agencies and initiate consultation, to ensure that such impacts are minimized or mitigated.

## **B. Impact to Coastal Zones**

The Coastal Zone Management Act (CZMA) requires that Federal activities and licenses, including Federally permitted activities, must be consistent with an approved state Coastal Management Plan (CZMA Sections 307(c)(1) through (3)). Section 307(c) of the CZMA and implementing regulations at 40 CFR 930 prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State (or Territory) Coastal Zone Management program, and the State (or Territory) or its designated agency concurs with the certification. At this time, EPA has not received a consistency certification from the Guam Department of Commerce for the proposed Shell Guam F-1 Pier discharge. At the time the certification is received, EPA will review the certification and will make any necessary modification to the draft permit to ensure compliance with the Guam Coastal Management Plan.

## **C. Impact to Essential Fish Habitat**

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act (MSA) set forth a number of new mandates for the National Marine Fisheries Service, regional fishery management councils and other federal agencies to identify and protect important marine and anadromous fish species and habitat. The MSA requires Federal agencies to make a determination on Federal actions that may adversely impact Essential Fish Habitat in marine environments. Since this permit is for discharge to Apra Harbor which connects to the Philippine Sea is considered a marine ecosystem, federal requirements of the MSA apply to EPA's action to issue a renewed NPDES permit to discharge to Apra Harbor. Therefore EPA is required to make a determination whether this action may adversely impact Essential Fish Habitat. EPA provided a copy of the proposed permit and fact sheet to the National Marine Fisheries Service, and requested comments on the proposed permit. NMFS did not indicate that the proposed permit may adversely impact Essential Fish Habitat, and on this basis EPA has determined that reissuance of the NPDES permit for the Shell Guam F-1 Pier Fuel Storage Facility will not adversely affect impact Essential Fish Habitat, as defined under the MSA. However, if in the future EPA obtains information or is provided information that indicates that there could be adverse impacts to Essential Fish Habitat, EPA will contact the appropriate agency or agencies and initiate consultation, to ensure that such impacts are minimized or mitigated.

## **D. Impact to National Historic Properties**

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effect of their undertakings on historic properties either listed on, or eligible for listing on, the National Register of Historic Places. Pursuant to federal requirements of NHPA and 36 CFR 800.3(a)(1), EPA has determined that the draft permit does not have the potential to affect any historic or cultural properties.